

Amendments to the Claims/Listing of Claims

Claim 1 (Previously amended): An electromechanical drive or sensor element having a layer structure, which comprises

a plurality of piezoelectric ceramic layers,

an electrode layer which is arranged between two mutually facing surfaces of directly adjacent piezoelectric ceramic layers, and

an electrical connector for making electrical contact with the electrode layer,

in which case the connector is likewise arranged and is passed out between the two mutually facing surfaces of the piezoelectric ceramic layers.

Claim 2 (Previously amended): An electromechanical drive or sensor element having a layer structure,

having a plurality of piezoelectric ceramic layers,

in which mutually facing surfaces of directly adjacent piezoelectric ceramic layers are metallized by application of a metal coating,

which are joined together by means of diffusion welding,

so that an electrode layer is formed by the metallized surfaces,

with which contact can be made via an electrical connector.

Claim 3 (Previously amended): The drive or sensor element as claimed in claim 1, in which a groove is provided in at least one of the two mutually facing surfaces of the piezoelectric ceramic layers and at least partially holds the electrical connector.

Claim 4 (Previously amended): The drive or sensor element as claimed in claim 3, in which the connector is a wire which extends beyond the surfaces of the piezoelectric ceramic layers.

Claim 5 (Previously amended): The drive or sensor element as claimed in claim 3 having at least three piezoelectric ceramic layers and at least two grooves, in which these grooves are arranged offset with respect to one another and with respect to a longitudinal axis of the drive or sensor element.

Claim 6 (Previously amended): The drive or sensor element as claims claim 4 which is in the form of a wire and is a wire having a rippled or zigzag structure.

Claim 7 (Previously amended): The drive or sensor element as claimed in claim 1 having piezoelectric ceramic layers composed of PZT material.

Claim 8 (Previously amended): The drive or sensor element as claimed in claim 1 having piezoelectric ceramic layers composed of $\text{PbMg}_{0.308}\text{Nb}_{0.617}\text{Ti}_{0.075}\text{O}_3$.

Claim 9 (Currently amended): The drive or sensor element as claimed in claim 1 having piezoelectric ceramic layers composed of a material having a Curie temperature of more than 400°C , ~~for example composed of $\text{Na}_{0.5}\text{Bi}_{4.5}\text{Ti}_4\text{O}_{15}$ or $\text{Bi}_3\text{TiNbO}_9$.~~

Claim 10 (Previously amended): The drive or sensor element as claimed in claim 1 having electrode layers composed of a metallic material having a Curie temperature of more than 400°C .

Claim 11 (Previously amended): The drive or sensor element as claimed in claim 1 having electrode layers composed of bismuth-titanate.

Claim 12 (Previously amended): The drive or sensor element as claimed in claim 4 having connectors which are in the form of wires and are composed of a metallic material having high-temperature stability at more than 250°C .

Claim 13 (Currently amended): The drive or sensor element as claimed in claim 4 having connectors which are in the form of wires and are composed of a material which contains at least one of silver, ~~and contains~~ stainless steel, ~~or of such a material which contains~~ and a nickel alloy.

Claim 14 (Withdrawn)

Claim 15 (Previously amended): A level limit switch having a drive and having a sensor element as claimed in claim 1.

Claim 16 (Previously amended): The level limit switch as claimed in claim 15, in which the sensor element is separated from the drive by a non-polarized ceramic layer.

Claim 17 (Previously amended): An acceleration sensor having a sensor element as claimed claim 1.

Claim 18 (New): The drive or sensor element of claim 9, having piezoelectric ceramic layers composed of a material selected from the group consisting of $\text{Na}_{0.5}\text{Bi}_{4.5}\text{Ti}_4\text{O}_{15}$ and $\text{Bi}_3\text{TiNbO}_9$.

Claim 19 (New): The drive or sensor element of claim 2, in which a groove is provided in at least one of the two mutually facing surfaces of the piezoelectric ceramic layers and at least partially holds the electrical connector.

Claim 20 (New): The drive or sensor element of claim 4, having connectors which are in the form of wires and are composed of a material that contains at least one of silver, stainless steel, and a nickel alloy and has high temperature stability at more than 250°C.